



# 6AS7-GA

## TWIN TRIODE

**6AS7-GA**  
ET-T931  
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### DESCRIPTION AND RATING

The 6AS7-GA is a low-mu twin triode designed primarily for service as a series regulator tube in d-c power supplies. Except for the use of a T-12 envelope, the 6AS7-GA is identical to the 6AS7-G.

#### GENERAL

##### ELECTRICAL

Cathode—Coated Unipotential

Heater Voltage, AC or DC . . . . . 6.3 Volts  
Heater Current . . . . . 2.5 Amperes

Direct Interelectrode Capacitances, approximate\*

Grid to Plate, Each Section . . . . .	7.5 $\mu\text{mf}$
Input, Each Section . . . . .	6.5 $\mu\text{mf}$
Output, Each Section . . . . .	2.2 $\mu\text{mf}$
Heater to Cathode, Each Section . . . . .	7.0 $\mu\text{mf}$
Grid to Grid . . . . .	0.5 $\mu\text{mf}$
Plate to Plate . . . . .	1.9 $\mu\text{mf}$

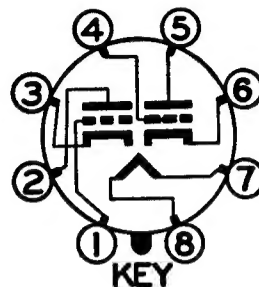
##### MECHANICAL

Mounting Position—Any

Envelope—T-12, Glass

Base—B8-110, Short Medium-Shell Octal 8-Pin

#### BASING DIAGRAM

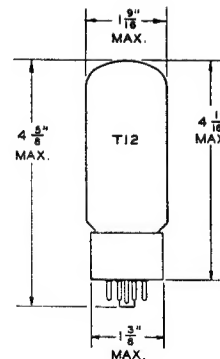


RETMA 8BD

#### TERMINAL CONNECTIONS

Pin 1—Grid (Section 2)  
Pin 2—Plate (Section 2)  
Pin 3—Cathode (Section 2)  
Pin 4—Grid (Section 1)  
Pin 5—Plate (Section 1)  
Pin 6—Cathode (Section 1)  
Pin 7—Heater  
Pin 8—Heater

#### PHYSICAL DIMENSIONS



GENERAL  ELECTRIC

**MAXIMUM RATINGS****DC AMPLIFIER SERVICE  
DESIGN-CENTER VALUES, EACH SECTION**

Plate Voltage . . . . .	250	Volts
Plate Dissipation . . . . .	13	Watts
Plate Current . . . . .	125	Milliamperes
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode . . . . .	300	Volts
Heater Negative with Respect to Cathode . . . . .	300	Volts
Grid-Circuit Resistance		
With Cathode-Bias† . . . . .	1.0	Megohm

**BOOSTER SCANNING SERVICE‡  
DESIGN-CENTER VALUES, EACH SECTION**

Peak Inverse Plate Voltage . . . . .	1700	Volts
Plate Dissipation . . . . .	13	Watts
Plate Current . . . . .	125	Milliamperes
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode . . . . .	300	Volts
Heater Negative with Respect to Cathode . . . . .	300	Volts
Grid-Circuit Resistance		
With Cathode-Bias† . . . . .	1.0	Megohm

**CHARACTERISTICS AND TYPICAL OPERATION****AVERAGE CHARACTERISTICS, EACH SECTION**

Plate Voltage . . . . .	135	Volts
Cathode-Bias Resistor . . . . .	250	Ohms
Amplification Factor . . . . .	2.0	
Plate Resistance, approximate . . . . .	280	Ohms
Transconductance . . . . .	7000	Micromhos
Plate Current . . . . .	125	Milliamperes

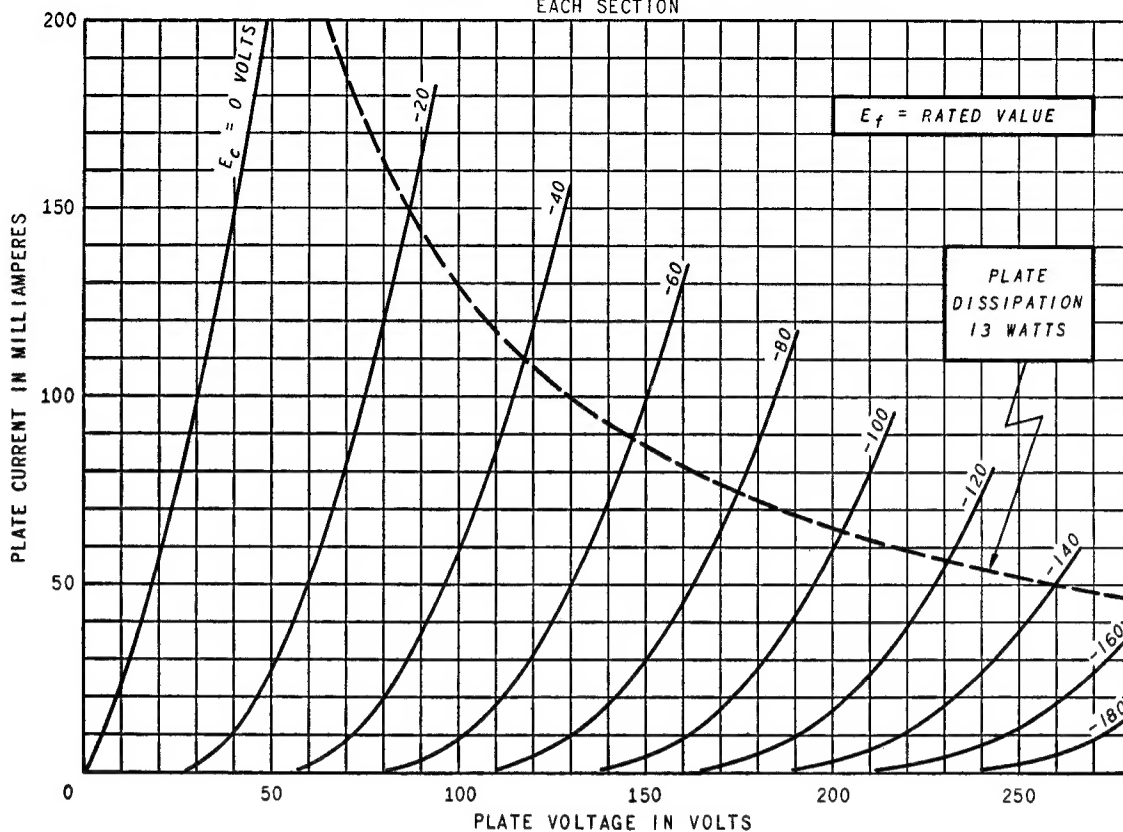
\* Without external shield.

† Operation with fixed bias is not recommended.

‡ For operation in a 525-line, 30-frame television system as described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission. The duty cycle of the voltage pulse must not exceed 15 percent of one scanning cycle.

# **AVERAGE PLATE CHARACTERISTICS**

EACH SECTION



# **AVERAGE TRANSFER CHARACTERISTICS**

EACH SECTION

